

**MOORE COUNTY PLANNING BOARD  
REGULAR MEETING  
THURSDAY, DECEMBER 1 2016, 6:00 PM  
MOORE COUNTY HISTORIC COURTHOUSE – 2<sup>nd</sup> Floor**

**CALL TO ORDER – 6 PM**

**INVOCATION – (Member Volunteer)**

**PLEDGE OF ALLEGIENCE – (Member Volunteer)**

**MISSION STATEMENT – (Member Volunteer)**

**I. PUBLIC COMMENT PERIOD** (*Procedures are attached*)  
Please sign up on the Public Comment Sign In sheet near the door

**II. APPROVAL OF CONSENT AGENDA**  
All items listed below are considered routine and will be enacted by one motion. No separate discussion will be held except by a member of the Planning Board:

- A. Approval of Meeting Agenda
- B. Approval of Minutes of October 6, 2016
- C. Consideration of Abstentions

**III. PUBLIC HEARING**

1. Pristine Sun Fund 12, LLC is requesting a Conditional Use Permit to construct a commercial Solar Collector Facility on approximately 12.28 acres of an overall approximately 28.15 acre parcel located at 2495 Jason Road (ParID 00009291), owned by Cynthia Dabestani as identified in Moore County tax records.

**IV. OTHER BOARD MATTERS**

**V. PLANNING DEPARTMENT REPORTS**

**VI. BOARD COMMENT PERIOD**

**VII. UPCOMING EVENTS**

- Monday, December 5, 2016 5:30 PM Board of Commissioners Meeting to be held at the Historic Courthouse in Carthage.
- Wednesday, November 30, 2016 2:00 PM Moore County Transportation Committee to be held at the Rick Rhyne Public Safety Center.
- Tuesday, January 3, 2017 5:30 PM Board of Commissioners Meeting to be held at the Historic Courthouse in Carthage
- **Thursday, January 5, 2017 6:00 PM Planning Board Meeting to be held at the Historic Courthouse in Carthage**

**VIII ADJOURNMENT**

*Special accommodations for individuals with disabilities or impairments will be made upon request to the extent that reasonable notice is give to the County.*

*Please see attached procedures for the Public Comment Period and public comment during Public Hearing*

## **PUBLIC COMMENT PROCEDURES MOORE COUNTY PLANNING BOARD**

*The Moore County Planning Board is committed to allowing members of the public an opportunity to offer comments and suggestions for the efficient and effective administration of government. In addition to public hearings, a special time is set aside for the purpose of receiving such comments and suggestions. All comments and suggestions addressed to the Board during the Public Comment Period shall be subject to the following procedures:*

- 1. The Public Comment period will be held at the beginning of the Board meeting. The comment period will be limited to a maximum of thirty minutes*
- 1. Persons who wish to address the Board during the Public Comment Period will register on a sign-up sheet available on the table outside the entrance door to the Meeting Room indicating contact information and topic. Sign-up sheets will be available beginning 30 minutes before the start of the meeting. No one will be allowed to have his/her name placed on the list by telephone request to County Staff.*
- 2. Each person signed up to speak will have three (3) minutes to make his/her remarks. Each person signed up to speak will only be entitled to the time allotted to each speaker and one additional time period which may be yielded to him/her by another individual who has also signed up to speak on a particular topic.*
- 1. Speakers will be acknowledged by the Board Chairperson in the order in which their names appear on the sign up sheet. Speakers will address the Board from the lectern at the front of the room and begin their remarks by stating their name and address.*
- 2. Public comment is not intended to require the Board to answer any impromptu questions. Speakers will address all comments to the Board as a whole and not one individual member. Discussions between speakers and members of the audience will not be allowed.*
- 3. Speakers will be courteous in their language and presentation. Matters or comments which are harmful, discriminatory or embarrassing to any citizens, official or employee of Moore County shall not be allowed. Speaker must be respectful and courteous in their remarks and must refrain from personal attacks and the use of profanity.*
- 4. Only one speaker will be acknowledged at a time. If the time period runs out before all persons who have signed up get to speak, those names will be carried over to the next Public Comment Period.*
- 5. Any applause will be held until the end of the Public Comment Period.*
- 6. Speakers who have prepared written remarks or supporting documents are encouraged to leave a copy of such remarks and documents with the Chairperson.*
- 7. Information sheets outlining the process for the public's participation in Board meetings will also be available in the rear of the Meeting Room.*
- 8. Action on items brought up during the Public Comment Period will be at the discretion of the Board.*

*Adopted on the 4<sup>th</sup> day of February, 2010 by a 8 to 1 vote of the Moore County Planning Board.*

## **MOORE COUNTY PLANNING BOARD PUBLIC HEARINGS PROCEDURES**

*The Moore County Planning Board serves the public as well as the Board of Commissioners. During each public hearing a special time has been set aside for the purpose of receiving comments and suggestions. To insure that comments and suggestions are productive and not unnecessarily long, procedural rules for conducting public hearings are necessary. The following procedural rules will be utilized during public hearings of the Moore County Planning Board:*

- 1. Anyone who would like to address the Board during a public hearing should register on the appropriate sign-up sheet indicating their name and address. Sign-up sheets will be available on the table outside the entrance door to the Meeting Room 30 minutes before the start of the meeting. Information sheets outlining the process for the public's participation in Board meetings and public hearings will also be available. No one will be allowed to have his/her name placed on the list by telephone request to County Staff.*
- 2. Each speaker will be called by the Chairman to the lectern, will state their name and address clearly into the record before providing their comments.*
- 3. Speakers will address all comments to the Board as a whole and not to any one individual member. Speakers will be respectful, courteous, refrain from personal attacks and the use of profanity.*
- 4. Any applause will be held until the end of the public hearing.*
- 5. Speakers who have prepared written remarks or supporting documents are encouraged to leave a copy of such remarks and documents with the Secretary.*
- 6. Action on items brought up during the public hearing will be at the discretion of the Board.*

*Adopted on the 5<sup>th</sup> day of May, 2011 by a 9 to 0 vote of the Moore County Planning Board*

**MINUTES**  
**MOORE COUNTY PLANNING BOARD**  
**THURSDAY, OCTOBER 6 6:00 PM**  
**MOORE COUNTY HISTORIC COURTHOUSE – 2<sup>nd</sup> FLOOR**

**Board Members Present:** Joseph Garrison (Chair) Eddie Nobles (Vice Chairman),  
Gene Horne, Bobby Hyman, John Cook, Aaron McNeill,  
Scott McLeod, David Lambert

**Board Members Absent:** Rich Smith

**Staff Present:** Debra Ensminger, Planning Director  
Brenda White, Deputy County Attorney  
Theresa Thompson, Senior Planner  
Lydia Cleveland, Administrative and Transportation  
Program Manager

**CALL TO ORDER**

Chairman Joseph Garrison called the meeting to order at 6:00 pm.

**INVOCATION**

Board Member Aaron McNeill offered the invocation.

**PLEDGE OF ALLEGIANCE**

Vice Chairman Eddie Nobles led in citing of the Pledge of Allegiance.

**MISSION STATEMENT**

Board Member Bobby Hyman read the Moore County Mission Statement.

**PUBLIC COMMENT PERIOD**

There was no public comment.

**APPROVAL OF THE CONSENT AGENDA**

- A. Approval of Meeting Agenda
- B. Approval of Minutes of September 1, 2016
- C. Consideration of Abstentions

Board Member Gene Horne made a motion to approve the consent agenda. The motion was seconded by Vice Chairman Nobles and the motion passed unanimously 8-0.

## **PUBLIC HEARING(S)**

Chairman Garrison opened and explained public hearing number one as the following;

*Sheryl Evans is requesting a Conditional Use Permit for the use of a one-unit Bed & Breakfast in a single family residence located at 286 Heritage Farm Road (ParID 00038405), owned by Robert and Sheryl Evans, as identified in Moore County tax records.*

Senior Planner, Theresa Thompson stated the following as part of her presentation. “The applicant Sheryl Evans is requesting to open a one unit Bed and Breakfast in her single family residence located at 286 Heritage Farm Road. All adjacent properties are zoned RA-40 and the applicant will occupy the first floor of the three story home as indicated on the floor plan in your packets. The Fire Marshal, Building Inspector, and Environmental Health have met with the applicant and went over what will be required to obtain the necessary permits. The existing site, building, and proposed use are in compliance with all UDO standards. The UDO requires that the four findings of fact are met as included in the staff report. Any recommendation of denial would need to include which finding is not met and why. There may need to be minor adjustments made to the site plan therefore staff also recommends including an additional condition to the motion if approved as stated in the staff report. Please let me know if you have any questions.”

The Board did not have any additional questions.

Board Member David Lambert made a motion to endorse the Moore County Board of Commissioners to approve the Conditional Use Permit for the use of a one-unit Bed & Breakfast in a single family residence located at 286 Heritage Farm Road (ParID 00038405), owned by Sheryl Evans, as identified in Moore County tax records. The motion was seconded by Board Member Hyman and the motion passed unanimously 8-0.

Chairman Garrison closed public hearing number one.

Chairman Garrison opened and explained public hearing number two as the following;

*Pristine Sun Fund 12, LLC is requesting a Conditional Use Permit to construct a commercial Solar Collector Facility on approximately 12.28 acres of an overall approximately 28.15 acre parcel located at 2495 Jason Road (ParID 00009291), owned by Cynthia Dabestani as identified in Moore County tax records.*

Ms. Thompson stated the following as part of her presentation. “This request is to locate a solar collector facility at 2495 Jason Road which is approximately five and half miles west of Robbins. The subject property received conditional use permit approval for a solar collector facility on May 19, 2015 which has since expired. The project size has also increased from approximately eleven acres to approximately twelve and half acres. The proposed area is currently undeveloped. There is a small private cemetery, which will be fenced off from the solar collector facility, as illustrated on the site plan. Adjacent

uses include single family homes, undeveloped property, and agriculture. The project area will comprise of approximately 12.28 acres of the 28 acre lot. The site plan meets the UDO's screening requirements by utilizing a type 2 screening, which is a 3 foot high dense evergreen plant that shall be of a species normally expected to reach a height of 7 feet in 3 years time, to the side and rear of the property that is adjacent to residentially zoned property. In addition to the minimum screening requirements, the applicant also is installing type 2 screening along all property lines including the front property line, which is not a UDO requirement, as illustrated on the site plan. The proposed site plan meets all UDO requirements. Staff will ensure that all specific use standards will be met as specified in the UDO and will be inspected by county staff before a Certificate of Occupancy is issued. The UDO requires that the four findings of fact are met as included in the staff report and any recommendation of denial would need to include which finding is not met and why. There may need to be minor adjustments made to the site plan therefore staff also recommends including an additional condition to the motion if approved as stated in the staff report that reads "Should the Zoning Administrator, Building Inspections, Environmental Health, NCDOT, or the Fire Marshal identify minor changes, staff shall be authorized to accept such minor modifications to the site plan as necessary. Please let me know if you have any questions."

The Board did not have any questions for Ms. Thompson

Ms. Sylvia Baumberger stated that she owns adjoining property and herself and her husband Tom (also present) had several concerns including health hazards, property devaluation, the evergreen plants and if they will grow as indicated and remain green all year, confirmation if road access is required to the cemetery on the site plan, affects on cattle including service roads and pesticides, how existing septic and sewage lines would be affected, and finally if they were to purchase additional property would this interfere with the site plan as submitted.

Mr. Leonard Konopinski was present on behalf of the applicant and stated that he did not have answers to all the questions but would be willing find out those he does not have answers too. Mr. Konopinski explained that solar panels are one of the safest and cleanest forms of energy generation because there are no moving parts and no pollution is generated.

Board Member Scott McLeod asked Mr. Konopinski if he could explain the hazards associated with the panels. Mr. Konopinski explained that panels are typically made of crystal silicon which is non toxic. Board Member McLeod asked Mr. Konopinski to confirm if there are no toxic materials in the solar panels on behalf of the applicant. Mr. Konopinski stated that he could not confirm at the present time what the panels are made of but that this could be verified. Board Member McLeod asked if Mr. Konopinski had information regarding property values and he stated he did not.

Board Member Horne asked what the lifespan of the panels are, and Mr. Konopinski stated that they typically last for 25 years with a warranty of 30 years. Board Member

Horne asked how they are disposed of and the end of their useful life, and Mr. Konopinski stated that they can be recycled.

Board Member John Cook asked how vegetation would be controlled and Mr. Konopinski stated he was not familiar for this site. Several Board Members requested information regarding the pesticides due to the adjacent properties and the cattle of the property owners present.

Chairman Garrison gave the floor to the Planning and Transportation Director, Debra Ensminger. Ms. Ensminger recommended that this item be tabled for a future date when more information can be presented and answered by the applicant.

Board Member McLeod made a motion to table this hearing to a future meeting. The motion was seconded by Board Member Hyman and the motion passed unanimously 8-0.

Chairman Garrison left public hearing number two open to a future date.

Board Member Aaron McNeill requested to the applicant that a different site be considered because it does not fit in this area of the community.

Board Member Horne made a motion to adjourn as the Moore County Planning Board and reconvene as the Moore County Watershed Review Board. The motion was seconded by Board Member David Lambert and the motion passed unanimously 8-0.

Chairman Garrison opened and explained public hearing number three as the following

*Sandhills Center for Mental Health is seeking a Special Non-residential Intensity Allocation (SNIA) to increase the maximum built-upon area to 59.79 % on three adjacent properties located on Grant Street (ParID 00018148, 00030688, and 00020621) in the Seven Lakes Village Business district, owned by Sandhills Center for Mental Health, to construct an off-site parking lot adjacent to a proposed office building (185 Grant Street) that will be built across the road.*

Ms. Thompson stated the following as part of her presentation. "Sandhills Center for Mental Health is requested to increase the maximum built upon area to 59.79% on three adjacent properties located on Grant Street in the Seven Lakes Village Business District. The request to construct an off-site parking lot adjacent to a proposed office building that is being constructed across the road. The property is located in the Balance of Watershed III Little River Vass Watershed Overlay District. The watershed district allows up to 24% built upon area except through the approval of a SNIA which you can approve up to 70% built upon area. So far, nine SNIA's have been approved in the Little River Watershed for a total of 7.63 acres leaving a balance of 1,169.64 acres for future allocations. State law requires 5% to be set aside of the total 1,168.81 acres for public projects such as school and utility stations which is 61.96 acres so that number will remain the same. The applicant submitted the stormwater control plans illustrating a retention pond being located adjacent to the parking lot. The project's engineer also includes a letter stating the

stormwater plan is designed in accordance with NCDEQ Stormwater best management practice manual. The applicant has also recombined the parcels so the Moore County Tax department will issue one Parcel ID for the project. The applicant meets all UDO requirements for SNIA approval and therefore staff recommends approval of the SNIA request. Please let me know if you have any questions.”

Tim Carpenter with LKC Engineering was present on behalf of the applicant.

Board Member McLeod asked what stormwater device will be installed. Mr. Carpenter explained that there will be a couple of basins in and around the parking lot.

Board Member Cook asked if adjoining property owners are aware of this project. Mr. Carpenter stated that he is unaware of the notifications required for this type of item but they are currently grading the parking lot across the road so people are aware of a project taking place.

Board Member Lambert made a motion to approve the Special Non-residential Intensity Allocation (SNIA) to increase the maximum built-upon area to 59.79 % on three adjacent properties known as ParID 00018148, 00030688, and 00020621, owned by Sandhills Center for Mental Health. The motion was seconded by Vice Chairman Nobles and the motion passed unanimously 8-0.

Board Member Hyman made a motion to adjourn as the Moore County Watershed Review Board and Reconvene as the Moore County Planning Board. The motion was seconded by Board Member Horne and the motion passed unanimously 8-0.

## **OTHER BOARD MATTERS**

No other Board Matters were discussed.

## **PLANNING DEPARTMENT REPORTS**

Ms. Ensminger stated that there are no items for the November regular meeting and introduced the online training. Ms. Ensminger asked if they would like to proceed with this training during this time and the Board agreed to proceed with training on November 3, 2016 and walk through topics starting with number one.

Ms. Ensminger stated to the Board that the Unified Development Ordinance will go before the Board of Commissioners on October 18, 2016.

## **BOARD COMMENT PERIOD**

Board Member McNeill stated that all the plants are dead at the solar farm site on 211 near Sandhills Turf. Ms. Thompson stated that she would follow up with them in regards to this matter.

Board Member McLeod asked if we had any enforcement power and Ms. Thompson stated that we do because it is part of the agreement and if they do not follow up the Conditional Use Permit can be revoked.

Ms. Ensminger stated that she will follow up with the representative for this site and will let them know that this is the last chance and if not corrected the Conditional Use Permit will be null and void and electric will be disconnected.

Garrison asked if a solar farm could be classified as an industrial use and Ms. Ensminger stated that we have very little industrial zoning in the county and a rezoning would be required for most potential applicants in order to proceed.

The Board agreed with this classification as a conditional use therefore Board Member McLeod made a motion to modify the classification of a Commercial Solar Collector Facility from being permitted as a conditional use in the RA to strictly Industrial (I). The motion was seconded by Board Member McNeill; the Board held a discussion regarding spot zoning issues and Ms. Ensminger stated that they would be informed if a request was spot zoning, and so the motion passed unanimously 8-0.

Ms. Ensminger stated that staff will update this within the Unified Development Ordinance when it goes before the Board of Commissioners on October 18, 2016.

## **ADJOURNMENT**

Board Member Hyman made a motion to adjourn the October 6, 2016 regular meeting. The motion was seconded by Vice Chairman Nobles and the motion passed unanimously 8-0.

Respectfully submitted by,

Lydia Cleveland

**MEMORANDUM TO THE PLANNING BOARD**

**FROM:** Debra Ensminger  
Planning & Transportation Director

**DATE:** November 7, 2016

**SUBJECT:** Conditional Use Permit Request: Solar Collector Facility,  
Commercial (“Dabestani Solar” – Jason Road)

**PRESENTER:** Theresa Thompson

**REQUEST**

Pristine Sun Fund 12, LLC is requesting a Conditional Use Permit to construct a commercial Solar Collector Facility on approximately 12.28 acres of an overall approximately 28.15 acre parcel located at 2495 Jason Road, owned by Cynthia Dabestani as identified in Moore County tax records.

This case was properly advertised, a public hearing sign was posted on the property, and all adjacent property owners were notified.

**BACKGROUND**

- The Planning Board did not take action on this request on October 6, 2016. The applicant has updated the site plan showing that access to the cemetery is not restricted by the solar collector facility. The applicant also submitted a property value impact study.
- A conditional use permit was originally approved for a solar collector facility on May 19, 2015 which has since expired. The project size has also increased.
- Current land use – The current use of the property is agricultural (pasture for cows). There is a small private cemetery as illustrated on the site plan.
- Adjacent land uses – Include single family homes, vacant parcels, and agriculture.

**REQUIRED FINDINGS FOR CONDITIONAL USE PERMIT**

In considering a Conditional Use Permit the following Findings of Fact are required:

1. The use will not materially endanger the public health or safety if located where proposed and developed according to plan;
2. The use meets all required conditions and specifications;
3. The use will not substantially injure the value of adjoining or abutting property unless the use is a public necessity;
4. The location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located and will be in general conformity with the approved Moore County Land Use Plan.

### **APPLICATION REVIEW COMMENTS & RECOMMENDATIONS**

The proposed site plan meets all Unified Development Ordinance requirements. Staff recommends the additional condition, as agreed upon by the applicant, that should the Zoning Administrator, Building Inspector, Environmental Health, the Fire Marshal, or NCDOT identify minor changes staff shall be authorized to accept such minor modifications to site plan as necessary.

### **RECOMMENDATION**

Staff recommends the Moore County Planning Board make the following motion:

**Motion:** Make a motion to endorse the Moore County Board of Commissioners to approve/deny the Conditional Use Permit for the use of a Solar Collector Facility located at 2495 Jason Road (ParID 00009291), owned by Cynthia Dabestani as identified in Moore County tax records, including the Application Review Comments and Recommendations as listed in the staff report.

### **ATTACHMENTS**

- Picture of Property
- Land Use Map
- Conditional Use Permit Application
- Updated Submitted Site Plan
- Property Value Study

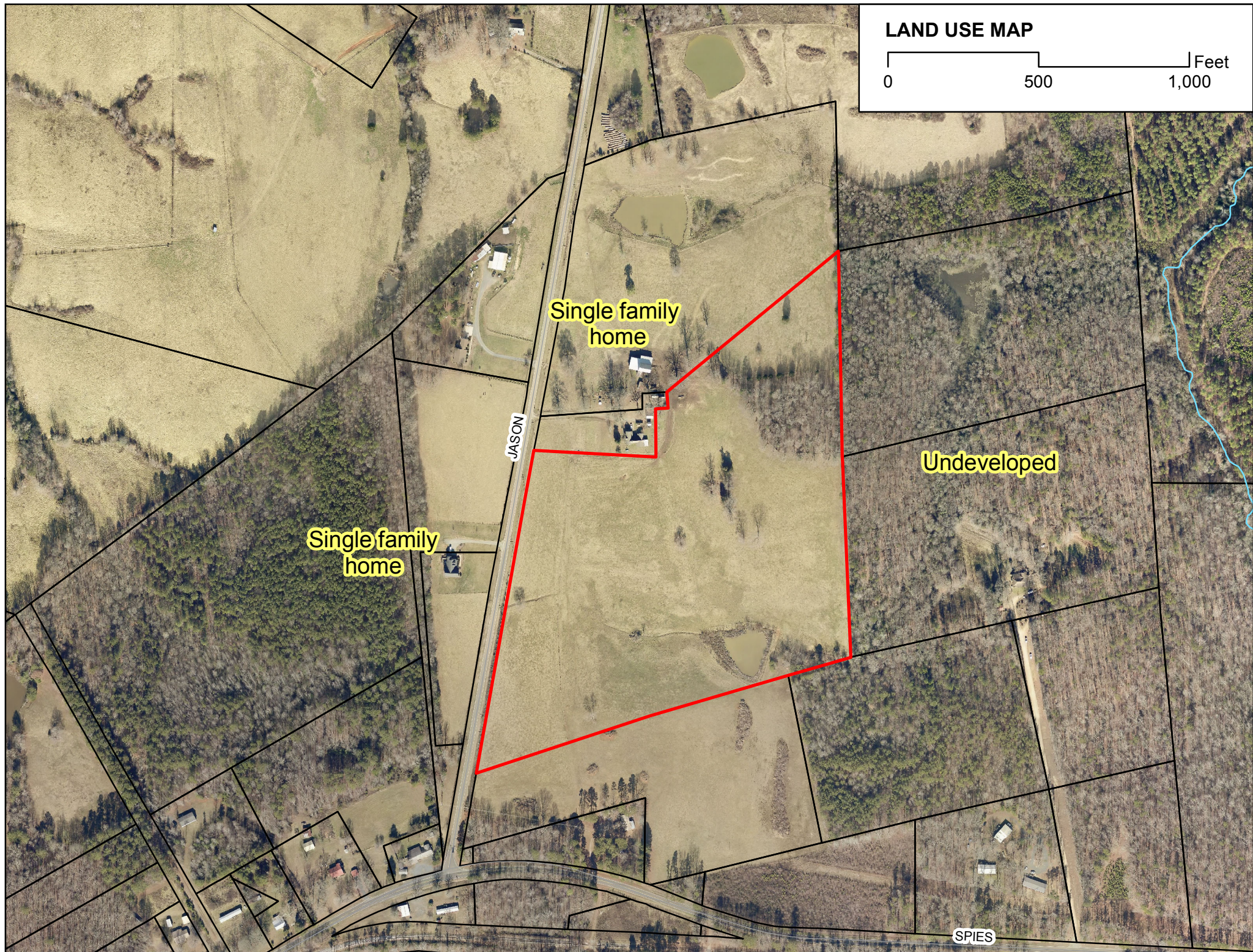
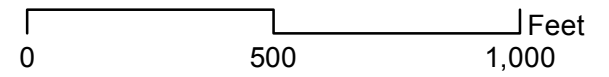
**Property is located adjacent to the white house.**



**View of property from Jason Road.**



LAND USE MAP





# PLANNING & COMMUNITY DEVELOPMENT



P.O. Box 905  
1048 Carriage Oaks Drive  
Carthage, NC 28327  
Planning: 910.947.5010  
Central Permitting: 910.947.2221  
Fax: 910.947.1303  
www.moorecountync.gov

## Conditional Use Permit Application

Application Date: 7/28/2016			
Location/Address of Property: 2495 Jason Road Star, NC 27356 (APN: 769000081910)			
Applicant: Pristine Sun Fund 12, LLC		Phone: 415.872.3449	
Applicant Address: 1300 Clay Street, Suite 550	City: Oakland	St: CA	Zip: 94612
Owner: Cynthia Dabestani		Phone:	
Owner Address: 5120 Treewood Ct.	City: Charlotte	St: NC	Zip: 28215
Current Zoning District: RA	Proposed Use: 2 MWAC Solar Project		
Comments: The system size is 2.6 MW DC and 2.0 MW AC.			

### Application Submittal

The applicant must submit a complete application packet on or before the submittal deadline. This includes:

- ☐ Completed Moore County Conditional Use Permit Application.
- ☐ Application Fee (\$175).
- ☐ Postage sufficient to notify all adjacent landowners **FOR TWO MAILINGS**. (One for Planning Board meeting, and one for Board of Commissioners meeting.) The rate for postage **FOR EACH CERTIFIED MAIL LETTER** is \$6.49. This includes \$3.30 (certified mail) plus \$2.70 (return receipt) plus \$0.49 (first class stamp).
- ☐ A detailed site plan. (See page two of this packet for list of items to include.)

I (We), the undersigned, certify that all statements furnished in this application are true to the best of my (our) knowledge, and do hereby agree to follow all reasonable requests for information as designated by the County of Moore Zoning Administrator.

	7/28/2016
Applicant/Owner Signature	Date
	09/12/16
Applicant/Owner Signature	Date

Office Use Only:

PAR ID: 00009291  
  
Received By: \_\_\_\_\_ Date: 8/30/16



1 VICINITY MAP  
NTS

GENERAL NOTES:

1. A WETLANDS DELINEATION OF THE PROPERTY HAS BEEN PERFORMED.
2. ALL ELECTRIC FEEDS WILL BE UNDERGROUND UP TO THE UTILITY POINT OF THE INTERCONNECTION. PROPOSED INTERCONNECTION POINT LOCATED ON MAP.
3. SITE WILL COMPLY WITH UDO SECTION 9.3.27 PER ATTACHMENT LETTER.
4. DETAIL FOR PRELIMINARY ARCHITECTURE PLAN FOR THE PANELS IS ON SEPARATE SHEET TITLED "SINGLE POST ELEVATION & PLAN VIEWS"

PROPERTY INFORMATION:

OWNER: CYNTHIA DABESTANI  
OWNER ADDRESS: 5120 TRACEWOOD COURT, CHARLOTTE, NC 28215  
APN: 769000081910  
COUNTY: MOORE  
ZONING: RA  
PARCEL ACREAGE: 28.15  
SOLAR ACREAGE: 12.28

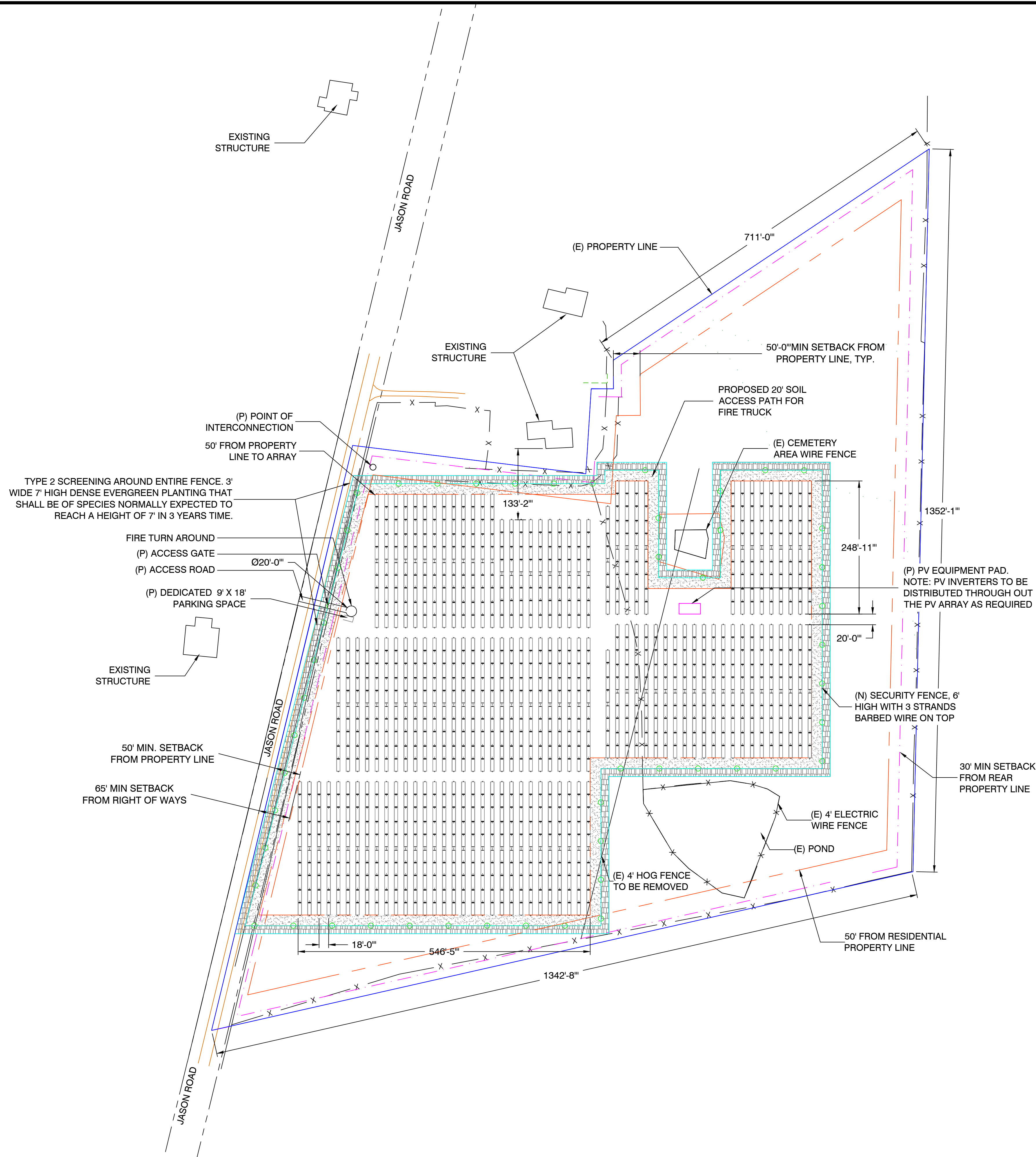
SYSTEM INFORMATION:

MODULES: (8,280) RENESOLA VIRTUS II JC315M-24/Abs  
SYSTEM SIZE: 2.60 MWDC  
INVERTERS: SMA SUNNY TRIPOWER 60  
STRING LENGTH: --  
NO. OF STRINGS: --

Proposed Conditions			Area (sf)	Area (ac)	% of Total
Imprevious					
Existing Drives to Remain			0	0.000	0.000%
Existing Structure to Remain			0	0.000	0.000%
Proposed Drives			0	0.000	0.000%
Switchgear Pads		# of Pads	Area / Pad (sf)	Switchgear Total	
		1	100	100	0.0023 0.008%
Rack Post	Post / Row	# of Rows	Area / Post (in2)	Rack Post Total	
	11	115	11065.6	76.8 0.0018	0.014%
Previous					
Wooded Areas			81764	1.8770	6.67%
Agriculture Fields / Lawns			1144450	26.2730	93.33%
Total Area =			1226214	28.1500	100.00%
Proposed % Imprevious =				0.022%	
Maximum Allowable Imprevious Percentage = 24%					

ADDITIONAL NOTES:

1. INVERTERS WILL BE POLE MOUNTED TO ARRAY RACKING ACROSS THE SITE AND INVERTERS WILL BE LOCATED MIN 150 FEEL FROM PROPERTY LINES.



1 SITE PLAN  
SCALE: 1" = 100'

CONFIDENTIALITY STATEMENT: THIS DRAWING IS THE PROPERTY OF SOLVIDA DESIGN & ENGINEERING. THIS INFORMATION IS CONFIDENTIAL AND IS TO BE USED ONLY IN CONNECTION WITH WORK DESCRIBED BY SOLVIDA. NO PART IS TO BE DISCLOSED TO OTHERS WITHOUT WRITTEN PERMISSION FROM SOLVIDA DESIGN & ENGINEERING

**SOLVIDA**  
DESIGN + ENGINEERING

1641 Kains Avenue, Berkeley, California 94702

**ReneSola**

RENSOLA PSNCF1, LLC  
1300 Clay St., Suite 550  
Oakland, CA 94612

2.60 MWDC  
Dabestani  
Solar Project 20052

2495 Jason Road  
Star, NC 27356

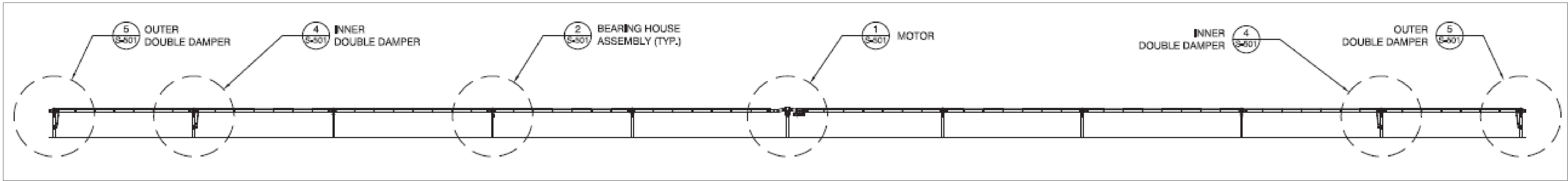
10	COMMENTS	11/22/16
9	COMMENTS	09/23/16
8	COMMENTS	08/30/16
7	COMMENTS	08/25/16
6	COMMENTS	08/22/16
REV. NO	DESCRIPTION	DATE

SHEET TITLE:

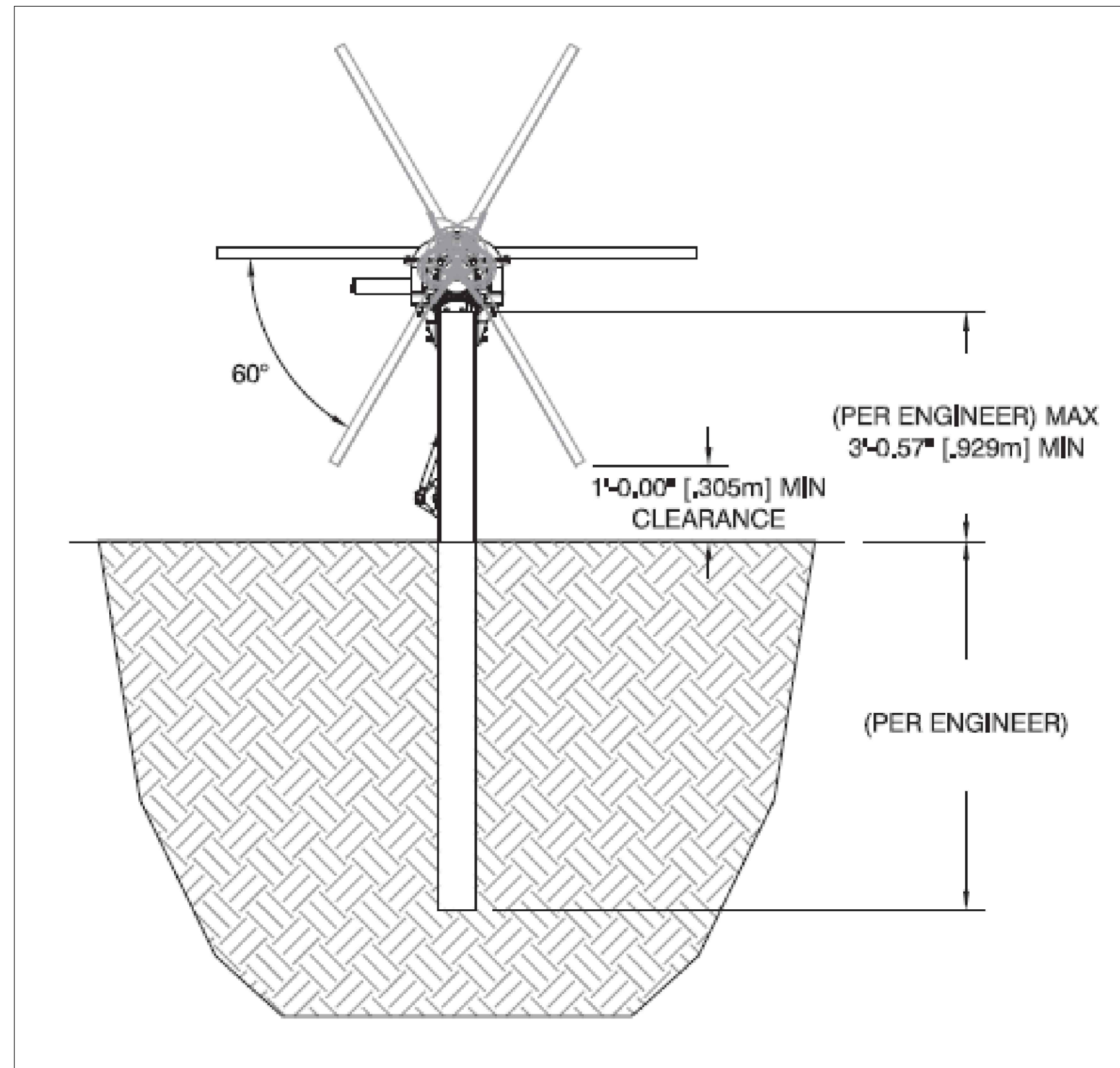
SITE PLAN

PROJ. MGR. SS	PROJ. ENGR. TK	DATE: 7/22/2016
DRAWN BY: RK	CHECKED BY: GB	SCALE:
DRAWING NO.		

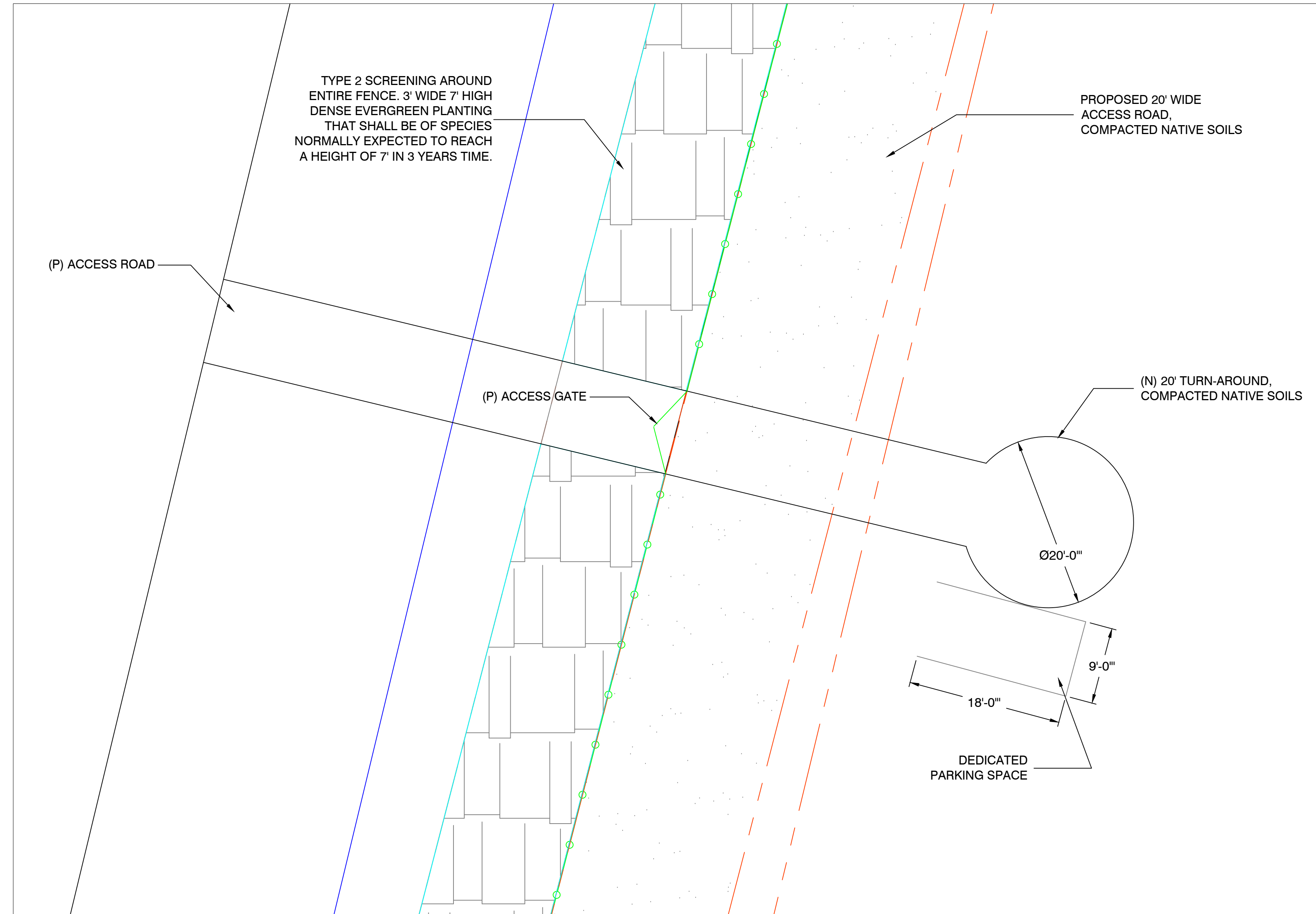
PV-100



1 EXTERIOR TRACKER - ELEVATION VIEW  
SCALE: NTS



2 TYPICAL PIER HEIGHT  
SCALE: NTS



3 SITE PLAN DETAILS  
SCALE: 1" = 100'

**SOLVIDA**  
DESIGN + ENGINEERING

1641 Kains Avenue, Berkeley, California 94702

**ReneSola**

RENSOLA PSNCF1, LLC  
1300 Clay St., Suite 550  
Oakland, CA 94612

## 2.60 MWDC Dabestani Solar Project 20052

2495 Jason Road  
Star, NC 27356

10	COMMENTS	11/22/16
9	COMMENTS	09/23/16
8	COMMENTS	08/30/16
7	COMMENTS	08/25/16
6	COMMENTS	08/22/16
REV. NO	DESCRIPTION	DATE

SHEET TITLE:

### SITE PLAN DETAILS

PROJ. MGR. SS	PROJ. ENGR. TK	DATE: 7/22/2016
DRAWN BY: RK	CHECKED BY: GB	SCALE:
DRAWING NO.		

## PV-101



# Kirkland Appraisals, LLC

Richard C. Kirkland, Jr., MAI  
9408 Northfield Court  
Raleigh, North Carolina 27603  
Phone (919) 414-8142  
[rkirkland2@gmail.com](mailto:rkirkland2@gmail.com)  
[www.kirklandappraisals.com](http://www.kirklandappraisals.com)

November 22, 2016

Mr. Brett Smith  
ReneSola Energy, Inc.  
1300 Clay Street, Suite 550  
Oakland, CA 94612

**RE: Dabestani Solar Impact Study**

Dear Mr. Smith:

At your request, I have considered the impact of a solar farm proposed to be constructed on 12.28 acres out of a parent tract of 28.15 acres located at 2495 Jason Road, Star, North Carolina. Specifically, I have been asked to give my professional opinion on whether the proposed solar farm will “substantially injure the value of adjoining or abutting property” and whether “the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located.”

To form an opinion on these issues, I have researched and visited existing and proposed solar farms in North Carolina, researched articles through the Appraisal Institute and other studies, and discussed the likely impact with other real estate professionals. I have not been asked to assign any value to any specific property.

This letter is a limited report of a real property appraisal consulting assignment and subject to the limiting conditions attached to this letter. My client is ReneSola Energy, Inc. represented to me by Mr. Brett Smith. My findings support the Conditional Use Permit application. The effective date of this consultation is November 22, 2016.

**Proposed Use Description**

The proposed solar farm to be constructed on 12.28 acres out of a parent tract of 28.15 acres located at 2495 Jason Road, Star, North Carolina.

Adjoining land is primarily residential and agricultural uses. The solar farm will consist of solar panels that will generate no noise, no odor, and less traffic than a residential subdivision. The panels will be less than 10 feet in height and located behind a chain link fence.

I note that this proposed project is for a 2 MW Solar Farm, whereas most of the solar farms in NC are larger than this at 5 MW.

I have considered adjoining uses and included a map to identify each parcel's location. The breakdown of those uses by acreage and number of parcels is summarized below.

**Adjoining Use Breakdown**

	<b>Acreage</b>	<b>Parcels</b>
Residential	62.25%	88.89%
Agricultural	37.75%	11.11%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

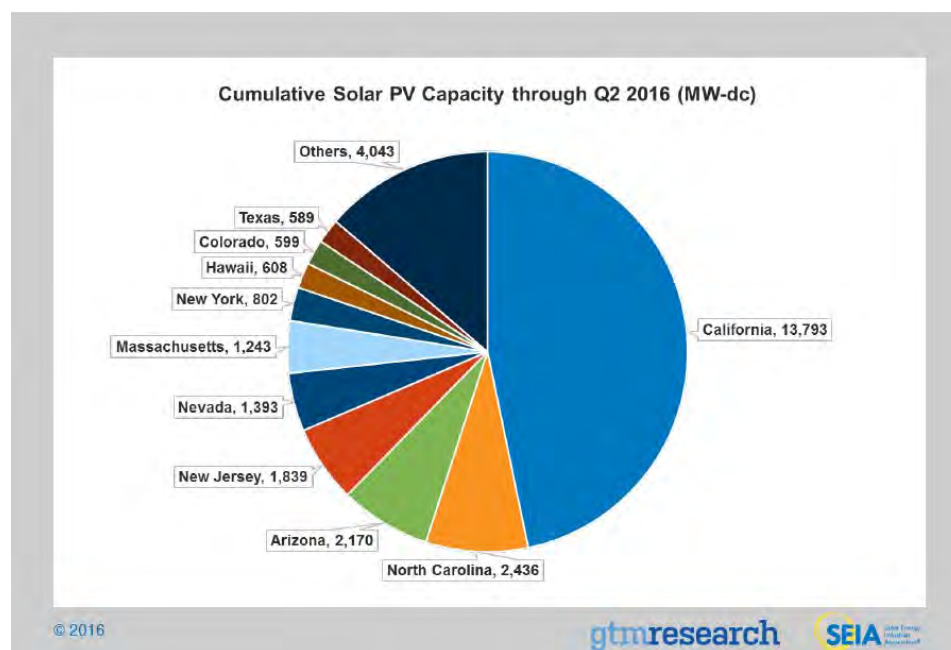
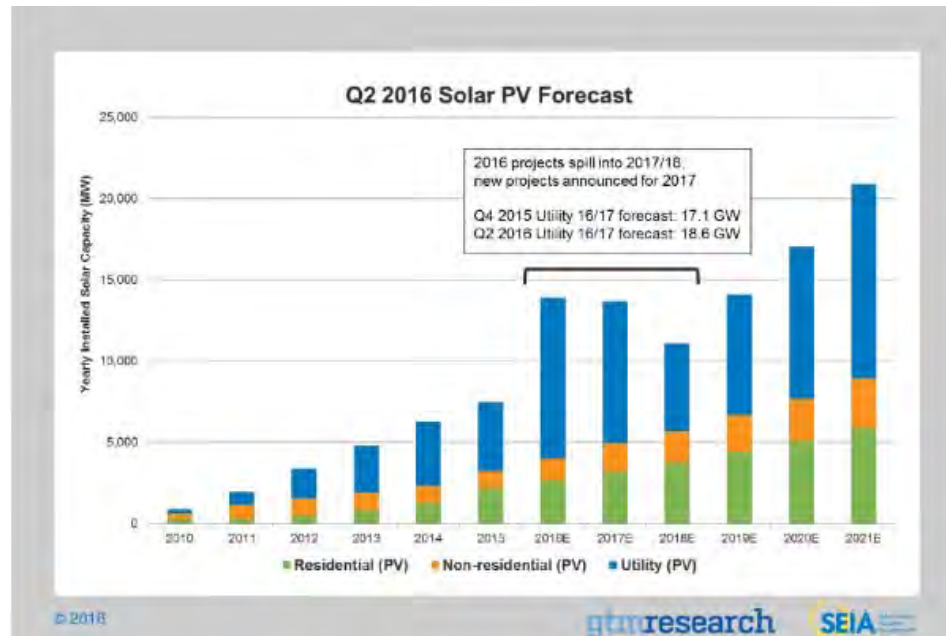


### Surrounding Uses

#	MAP ID	Owner	GIS Data		% Adjoining	% Adjoining	Distance in Feet:
			Acres	Present Use	Acres	Parcels	Home to Panels
1	20080394	Freeman	1.34	Residential	1.11%	11.11%	125
2	20080395	Baumberger	15.36	Residential	12.68%	11.11%	335
3	9295	Kern	45.733	Agricultural	37.75%	11.11%	N/A
4	10521	Kern	15	Residential	12.38%	11.11%	N/A
5	10519	Kern	15	Residential	12.38%	11.11%	700
6	20020455	Kern	10	Residential	8.25%	11.11%	N/A
7	9276	Baumberger	10.36	Residential	8.55%	11.11%	N/A
8	94000012	Baumberger	5.87	Residential	4.85%	11.11%	N/A
9	20050641	Garner	2.49	Residential	2.06%	11.11%	240
<b>Total</b>			<b>121.153</b>		<b>100.00%</b>	<b>100.00%</b>	350

## I. Overview of Solar Farms Development in North Carolina

Across the nation the number of solar installations has dramatically increased over the last few years as changes in technology and the economy made these solar farms more feasible. The charts below show how this market has grown and is expected to continue to grow from 2010 to 2017, the drop off in 2017/2018 is expected due to the expiration of tax credits for solar installations. Essentially the spike in 2016 is including projects pushed forward faster than normal and then a pause to absorb before a renewed growth pattern. The U.S. Solar Market Insight Reports for 2010 and 2011 which is put out by the Solar Energy Industries Association note that 2010 was a “breakout” year for solar energy. The continued boom of solar power is shown in the steady growth. North Carolina was ranked as having the second most active photovoltaic installed capacity in 2014.



North Carolina ranked second in cumulative installed solar energy in the United States.

## **II. Market Analysis of the Impact on Value from Solar Farms**

I have researched a number of solar farms in North Carolina to determine the impact of these facilities on the value of adjoining property. I have provided a breakdown of the adjoining uses to show what adjoining uses are typical for solar farms and what uses would likely be considered consistent with a solar farm use. This breakdown is included in the Harmony of Use section of this report.

I also conducted a series of matched pair analyses. A matched pair analysis considers two similar properties with only one difference of note to determine whether or not that difference has any impact on value. Within the appraisal profession, matched pair analysis is a well-recognized method of measuring impact on value. In this case, I have considered residential properties adjoining a solar farm versus similar residential properties that do not adjoin a solar farm. I have also considered matched pairs of vacant residential and agricultural land.

As outlined in the discussion of each matched pair, I concluded from the data and my analysis that there has been no impact on sale price for residential, agricultural, or vacant residential land that adjoins the existing solar farms included in my study.

## 1. **Matched Pair – AM Best Solar Farm, Goldsboro, NC**

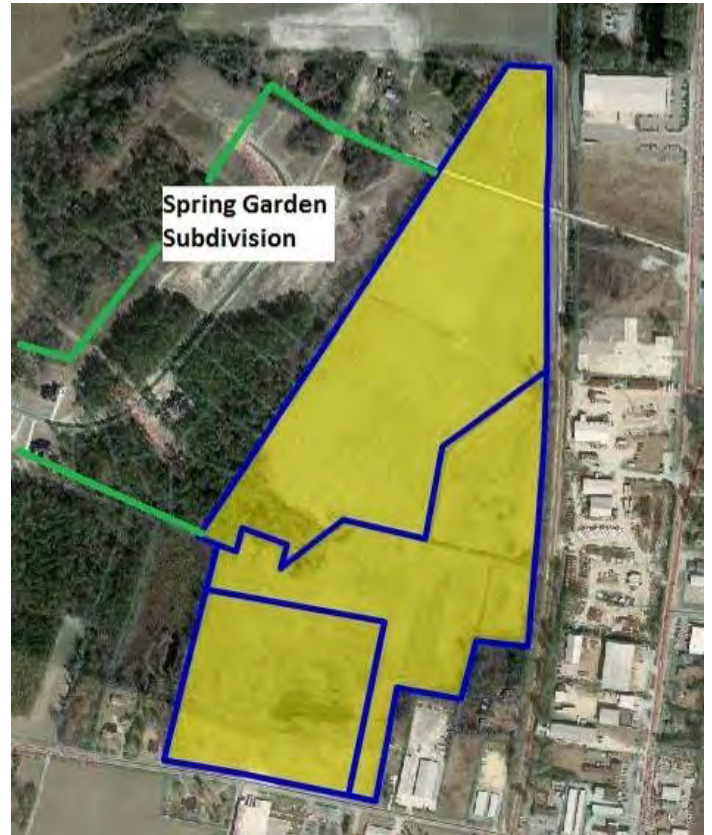
This solar farm adjoins Spring Garden Subdivision which had new homes and lots available for new construction during the approval and construction of the solar farm. The recent home sales have ranged from \$200,000 to \$250,000. This subdivision sold out the last homes in late 2014. The solar farm is clearly visible particularly along the north end of this street where there is only a thin line of trees separating the solar farm from the single-family homes.






Homes backing up to the solar farm are selling at the same price for the same floor plan as the homes that do not back up to the solar farm in this subdivision. According to the builder, the solar farm has been a complete non-factor. Not only do the sales show no difference in the price paid for the various homes adjoining the solar farm versus not adjoining the solar farm, but there are actually more recent sales along the solar farm than not. There is no impact on the sellout rate, or time to sell for the homes adjoining the solar farm.

I spoke with a number of owners who adjoin the solar farm and none of them expressed any concern over the solar farm impacting their property value.

The data presented on the following page shows multiple homes that have sold in 2013 and 2014 adjoining the solar farm at prices similar to those not along the solar farm. These series of sales indicate that the solar farm has no impact on the adjoining residential use.

The homes that were marketed at Spring Garden are shown below.



	<b>Americana</b> SqFt: 3,194 Bed / Bath: 3 / 3.5	Price: \$237,900 <a href="#">View Now »</a>		<b>Washington</b> SqFt: 3,292 Bed / Bath: 4 / 3.5	Price: \$244,900 <a href="#">View Now »</a>
	<b>Presidential</b> SqFt: 3,400 Bed / Bath: 5 / 3.5	Price: \$247,900 <a href="#">View Now »</a>		<b>Kennedy</b> SqFt: 3,494 Bed / Bath: 5 / 3	Price: \$249,900 <a href="#">View Now »</a>
	<b>Virginia</b> SqFt: 3,449 Bed / Bath: 5 / 3	Price: \$259,900 <a href="#">View Now »</a>			

**AM Best Solar Farm, Goldsboro, NC****Matched Pairs**

As of Date: 9/3/2014

**Adjoining Sales After Solar Farm Completed**

<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GBA</b>	<b>Style</b>
3600195570	Helm	0.76	Sep-13	\$250,000	2013	3,292	\$75.94	2 Story
3600195361	Leak	1.49	Sep-13	\$260,000	2013	3,652	\$71.19	2 Story
3600199891	McBrayer	2.24	Jul-14	\$250,000	2014	3,292	\$75.94	2 Story
3600198632	Foresman	1.13	Aug-14	\$253,000	2014	3,400	\$74.41	2 Story
3600196656	Hinson	0.75	Dec-13	\$255,000	2013	3,453	\$73.85	2 Story
	Average	1.27		\$253,600	2013.4	3,418	\$74.27	
	Median	1.13		\$253,000	2013	3,400	\$74.41	

**Adjoining Sales After Solar Farm Announced**

<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GBA</b>	<b>Style</b>
0	Feddersen	1.56	Feb-13	\$247,000	2012	3,427	\$72.07	Ranch
0	Gentry	1.42	Apr-13	\$245,000	2013	3,400	\$72.06	2 Story
	Average	1.49		\$246,000	2012.5	3,414	\$72.07	
	Median	1.49		\$246,000	2012.5	3,414	\$72.07	

**Adjoining Sales Before Solar Farm Announced**

<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GBA</b>	<b>Style</b>
3600183905	Carter	1.57	Dec-12	\$240,000	2012	3,347	\$71.71	1.5 Story
3600193097	Kelly	1.61	Sep-12	\$198,000	2012	2,532	\$78.20	2 Story
3600194189	Hadwan	1.55	Nov-12	\$240,000	2012	3,433	\$69.91	1.5 Story
	Average	1.59		\$219,000	2012	2,940	\$74.95	
	Median	1.59		\$219,000	2012	2,940	\$74.95	

**Nearby Sales After Solar Farm Completed**

<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GBA</b>	<b>Style</b>
3600193710	Barnes	1.12	Oct-13	\$248,000	2013	3,400	\$72.94	2 Story
3601105180	Nackley	0.95	Dec-13	\$253,000	2013	3,400	\$74.41	2 Story
3600192528	Mattheis	1.12	Oct-13	\$238,000	2013	3,194	\$74.51	2 Story
3600198928	Beckman	0.93	Mar-14	\$250,000	2014	3,292	\$75.94	2 Story
3600196965	Hough	0.81	Jun-14	\$224,000	2014	2,434	\$92.03	2 Story
3600193914	Preskitt	0.67	Jun-14	\$242,000	2014	2,825	\$85.66	2 Story
3600194813	Bordner	0.91	Apr-14	\$258,000	2014	3,511	\$73.48	2 Story
3601104147	Shaffer	0.73	Apr-14	\$255,000	2014	3,453	\$73.85	2 Story
	Average	0.91		\$246,000	2013.625	3,189	\$77.85	
	Median	0.92		\$249,000	2014	3,346	\$74.46	

**Nearby Sales Before Solar Farm Announced**

<b>TAX ID</b>	<b>Owner</b>	<b>Acres</b>	<b>Date Sold</b>	<b>Sales Price</b>	<b>Built</b>	<b>GBA</b>	<b>\$/GBA</b>	<b>Style</b>
3600191437	Thomas	1.12	Sep-12	\$225,000	2012	3,276	\$68.68	2 Story
3600087968	Lilley	1.15	Jan-13	\$238,000	2012	3,421	\$69.57	1.5 Story
3600087654	Burke	1.26	Sep-12	\$240,000	2012	3,543	\$67.74	2 Story
3600088796	Hobbs	0.73	Sep-12	\$228,000	2012	3,254	\$70.07	2 Story
	Average	1.07		\$232,750	2012	3,374	\$69.01	
	Median	1.14		\$233,000	2012	3,349	\$69.13	

**Matched Pair Summary**

	<b>Adjoins Solar Farm</b>		<b>Nearby Solar Farm</b>	
	<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
Sales Price	\$253,600	\$253,000	\$246,000	\$249,000
Year Built	2013	2013	2014	2014
Size	3,418	3,400	3,189	3,346
Price/SF	\$74.27	\$74.41	\$77.85	\$74.46

**Percentage Differences**

Median Price	-2%
Median Size	-2%
Median Price/SF	0%

I note that 2308 Granville Drive sold again in November 2015 for \$267,500, or \$7,500 more than when it was purchased new from the builder two years earlier (Tax ID 3600195361, Owner: Leak). The neighborhood is clearly showing appreciation for homes adjoining the solar farm.

The Median Price is the best indicator to follow in any analysis as it avoids outlying samples that would otherwise skew the results. The median sizes and median prices are all consistent throughout the sales both before and after the solar farm whether you look at sites adjoining or nearby to the solar farm. The average for the homes nearby the solar farm shows a smaller building size and a higher price per square foot. This reflects a common occurrence in real estate where the price per square foot goes up as the size goes down. This is similar to the discount you see in any market where there is a discount for buying larger volumes. So when you buy a 2 liter coke you pay less per ounce than if you buy a 16 oz. coke. So even comparing averages the indication is for no impact, but I rely on the median rates as the most reliable indication for any such analysis.

**AM Best Solar Farm, Goldsboro, NC**



View of home in Spring Garden with solar farm located through the trees and panels – photo taken on 9/23/15.



View from vacant lot at Spring Garden with solar farm panels visible through trees taken in the winter of 2014 prior to home construction. This is the same lot as the photo above.

## **2. Matched Pair – White Cross Solar Farm, Chapel Hill, NC**

A new solar farm was built at 2159 White Cross Road in Chapel Hill, Orange County in 2013. After construction, the owner of the underlying land sold the balance of the tract not encumbered by the solar farm in July 2013 for \$265,000 for 47.20 acres, or \$5,606 per acre. This land adjoins the solar farm to the south and was clear cut of timber around 10 years ago. I compared this purchase to a nearby transfer of 59.09 acres of timber land just south along White Cross Road that sold in November 2010 for \$361,000, or \$6,109 per acre. After purchase, this land was divided into three mini farm tracts of 12 to 20 acres each. These rates are very similar and the difference in price per acre is attributed to the timber value and not any impact of the solar farm.

Type	TAX ID	Owner	Acres	Date	Price	\$/Acre	Notes	Conf By
Adjoins Solar	9748336770	Haggerty	47.20	Jul-13	\$265,000	\$5,614	Clear cut	Betty Cross, broker
Not Near Solar	9747184527	Purcell	59.09	Nov-10	\$361,000	\$6,109	Wooded	Dickie Andrews, broker

The difference in price is attributed to the trees on the older sale.

No impact noted for the adjacency to a solar farm according to the broker.

I looked at a number of other nearby land sales without proximity to a solar farm for this matched pair, but this land sale required the least allowance for differences in size, utility and location.

### **Matched Pair Summary**

	Adjoins Solar Farm		Nearby Solar Farm	
	Average	Median	Average	Median
Sales Price	\$5,614	\$5,614	\$6,109	\$6,109
Adjustment for Timber	\$500	\$500		
Adjusted	\$6,114	\$6,114	\$6,109	\$6,109
Tract Size	47.20	47.20	59.09	59.09

### **Percentage Differences**

Median Price Per Acre	0%
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This matched pair again supports the conclusion that adjacency to a solar farm has no impact on adjoining residential/agricultural land.

## **3. Matched Pair – Wagstaff Farm, Roxboro, NC**

This solar farm is located at the northeast corner of a 594-acre farm with approximately 30 acres of solar farm area. This solar farm was approved and constructed in 2013.

After approval, 18.82 acres were sold out of the parent tract to an adjoining owner to the south. This sale was at a similar price to nearby land to the east that sold in the same time from for the same price per acre as shown below.

Type	TAX ID	Owner	Acres	Present Use	Date Sold	Price	\$/AC
Adjoins Solar	0918-17-11-7960	Piedmont	18.82	Agricultural	8/19/2013	\$164,000	\$8,714
Not Near Solar	0918-00-75-9812 et al	Blackwell	14.88	Agricultural	12/27/2013	\$130,000	\$8,739

**Matched Pair Summary**

	<b>Adjoins Solar Farm</b>		<b>Nearby Solar Farm</b>	
	<b>Average</b>	<b>Median</b>	<b>Average</b>	<b>Median</b>
Sales Price	\$8,714	\$8,714	\$8,739	\$8,739
Tract Size	18.82	18.82	14.88	14.88

**Percentage Differences**

Median Price Per Acre 0%

This matched pair again supports the conclusion that adjacency to a solar farm has no impact on adjoining residential/agricultural land.

**4. Matched Pair – Mulberry, Selmer, TN**

This solar farm adjoins two subdivisions with Central Hills having a mix of existing and new construction homes. Lots in this development have been marketed for \$15,000 each with discounts offered for multiple lots being used for a single home site. I spoke with the agent with Rhonda Wheeler and Becky Hearnberger with United County Farm & Home Realty who noted that they have seen no impact on lot or home sales due to the solar farm in this community.

I have included a map below as well as data on recent sales activity on lots that adjoin the solar farm or are near the solar farm in this subdivision both before and after the announced plan for this solar farm facility. I note that using the same method I used to breakdown the adjoining uses at the subject property I show that the predominant adjoining uses are residential and agricultural, which is consistent with the location of most solar farms.



#### Adjoining Use Breakdown

	Acreage	Parcels
Commercial	3.40%	0.034
Residential	12.84%	79.31%
Agri/Res	10.39%	3.45%
Agricultural	73.37%	13.79%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

From the above map, I identified four recent sales of homes that occurred adjoining the solar farm both before and after the announcement of the solar farm. I have adjusted each of these for differences in size and age in order to compare these sales among themselves. As shown below after adjustment, the median value is \$130,776 and the sales prices are consistent with one outlier which is also the least comparable home considered. The close grouping and the similar price per point overall as well as the similar price per square foot both before and after the solar farm.

**Matched Pairs**

#	TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
6&7	0900 A 011.00	Henson	Jul-14	\$130,000	2.65	2007	1,511	\$86.04	1 Story	2 Garage
12	0900 A 003.00	Amerson	Aug-12	\$130,000	1.20	2011	1,586	\$81.97	1 Story	2 Garage
15	099C A 003.00	Smallwood	May-12	\$149,900	1.00	2002	1,596	\$93.92	1 Story	4 Garage
16	099C A 002.00	Hessing	Jun-15	\$130,000	1.00	1999	1,782	\$72.95	1 Story	2 Garage
		Average		\$134,975	1.46	2005	1,619	\$83.72		
		Median		\$130,000	1.10	2005	1,591	\$84.00		

#	TAX ID	Owner	Date Sold	Sales Price	Adjustments*					
					Acres	Built	GBA	Style	Parking	Total
6&7	0900 A 011.00	Henson	Jul-14	\$130,000	-\$7,500	\$2,600	\$6,453	\$0	\$0	\$131,553
12	0900 A 003.00	Amerson	Aug-12	\$130,000	\$0	\$0	\$0	\$0	\$0	\$130,000
15	099C A 003.00	Smallwood	May-12	\$149,900	\$0	\$6,746	-\$939	\$0	-\$15,000	\$140,706
16	099C A 002.00	Hessing	Jun-15	\$130,000	\$0	\$7,800	-\$14,299	\$0	\$0	\$123,501
		Average		\$134,975	-\$1,875	\$4,286	-\$2,196	\$0	-\$3,750	\$131,440
		Median		\$130,000	\$0	\$4,673	-\$470	\$0	\$0	\$130,776

\* I adjusted all of the comparables to a base line 2011 Year Built and 1,586 s.f. based on Lot 12

I also considered a number of similar home sales nearby that were both before and after the solar farm was announced as shown below. These homes are generally newer in construction and include a number of larger homes but show a very similar price point per square foot.

**Nearby Sales Before Solar Farm Announced**

TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
099B A 019	Durrance	Sep-12	\$165,000	1.00	2012	2,079	\$79.37	1 Story	2 Garage
099B A 021	Berryman	Apr-12	\$212,000	2.73	2007	2,045	\$103.67	1 Story	2 Garage
090O A 060	Nichols	Feb-13	\$165,000	1.03	2012	1,966	\$83.93	1 Story	2 Garage
	Average		\$180,667	1.59	2010	2,030	\$88.99		
	Median		\$165,000	1.03	2012	2,045	\$83.93		

**Nearby Sales After Solar Farm Announced**

TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	\$/GBA	Style	Parking
090N A 040	Carrithers	Mar-15	\$120,000	1.00	2010	1,626	\$73.80	1 Story	2 Garage
099C A 043	Cherry	Feb-15	\$148,900	2.34	2008	1,585	\$93.94	1 Story	2 Garage
	Average		\$134,450	1.67	2009	1,606	\$83.87		
	Median		\$134,450	1.67	2009	1,606	\$83.87		

I then adjusted these nearby sales using the same criteria as the adjoining sales to derive the following breakdown of adjusted values based on a 2011 year built 1,586 square foot home. The adjusted values are consistent with a median rate of \$128,665, which is actually lower than the values for the homes that back up to the solar farm.

Nearby Sales Adjusted				Adjustments*					
TAX ID	Owner	Date Sold	Sales Price	Acres	Built	GBA	Style	Parking	Total
099B A 019	Durrance	Sep-12	\$165,000	\$0	-\$825	-\$39,127	\$0	\$0	\$125,048
099B A 021	Berryman	Apr-12	\$212,000	-\$7,500	\$4,240	-\$47,583	\$0	\$0	\$161,157
090O A 060	Nichols	Feb-13	\$165,000	\$0	-\$825	-\$31,892	\$0	\$0	\$132,283
090N A 040	Carrithers	Mar-15	\$120,000	\$0	\$600	-\$2,952	\$0	\$0	\$117,648
099C A 043	Cherry	Feb-15	\$148,900	-\$7,500	\$2,234	\$94	\$0	\$0	\$143,727
	Average		\$165,500	-\$1,875	\$798	-\$30,389	\$0	\$0	\$134,034
	Median		\$165,000	\$0	-\$113	-\$35,510	\$0	\$0	\$128,665

\* I adjusted all of the comparables to a base line 2011 Year Built and 1,586 s.f. based on Lot 12

If you consider just the 2015 nearby sales, the range is \$117,648 to \$143,727 with a median of \$130,688. If you consider the recent adjoining sales the range is \$123,501 to \$131,553 with a median of \$127,527.

This difference is less than 3% in the median and well below the standard deviation in the sales. The entire range of the adjoining sales prices is overlapped by the range from the nearby sales. These are consistent data sets and summarized below.

#### Matched Pair Summary

	Adjoins Solar Farm		Nearby After Solar Farm	
	Average	Median	Average	Median
Sales Price	\$134,975	\$130,000	\$134,450	\$134,450
Year Built	2005	2005	2009	2009
Size	1,619	1,591	1,606	1,606
Price/SF	\$83.72	\$84.00	\$83.87	\$83.87

#### Percentage Differences

Median Price	3%
Median Size	1%
Median Price/SF	0%

Based on the data presented above, I find that the price per square foot for finished homes are not being impacted negatively by the presence of the solar farm. The difference in pricing in homes in the neighborhood is accounted for by differences in size, building age, and lot size. The median price for a home after those factors are adjusted for are consistent throughout this subdivision and show no impact due to the proximity of the solar farm. This is consistent with the comments from the broker I spoke with for this subdivision as well.

#### Conclusion

The solar farm matched pairs shown above have similar characteristics to the subject property in terms of location and adjoining uses. The data shown above shows no impact on adjoining residential property values as well as adjoining agricultural uses.

Below I have shown a breakdown of the adjoining uses for comparison with the adjoining uses at the subject property to show they have a very similar mix of adjoining residential and agricultural uses.

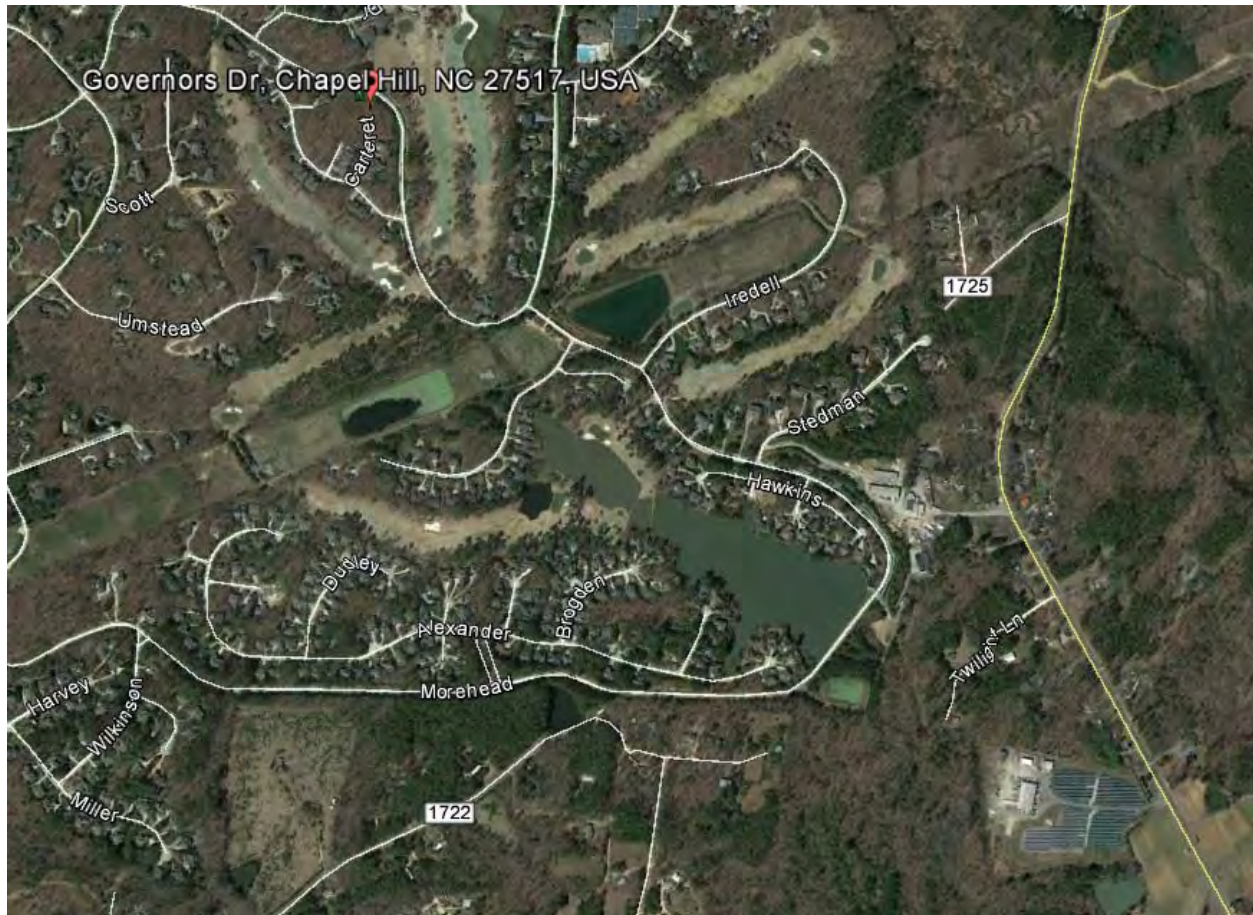
I have further considered demography for a 1 mile radius around the subject property and compared that to the 1 mile radius around the matched pair solar farms. The subject property is very similar to the median rates indicated below showing a strong correlation of the subject property site to the matched pair sites.

I therefore consider this to be strong support for comparing these matched pairs to the proposed solar farm at the subject property. I therefore conclude that the subject property will have no negative impact on value due to the proposed solar farm as the matched pairs in similar locations with similar population, similar household incomes, and similar price range of home showed no impact on value.

<b>Matched Pair Summary</b>				<b><u>Adjoining Uses By Acreage</u></b>				<b><u>1 mile Radius (2010-2014 Data, esri)</u></b>		
	<b>Name</b>	<b>City</b>	<b>County</b>	<b>Acres</b>	<b>Res</b>	<b>Ag</b>	<b>Com/Ind</b>	<b>Populat:</b>	<b>Med. Income</b>	<b>Avg. Housing Unit</b>
<b>1</b>	AM Best	Goldsboro, NC	Wayne	38	38%	23%	39%	1,523	\$37,358	\$148,375
<b>2</b>	White Cross	Chapel Hill, NC	Orange	45	5%	95%	0%	213	\$67,471	\$319,929
<b>3</b>	Wagstaff	Roxboro, NC	Person	30	7%	93%	0%	336	\$41,368	\$210,723
<b>4</b>	Mulberry	Selmer, TN	TN	160	13%	84%	3%	467	\$40,936	\$171,746
	<b>Average</b>			68.25	16%	74%	11%	635	\$46,783	\$212,693
	<b>Median</b>			41.5	10%	89%	2%	402	\$41,152	\$191,235
	Dabestani	Star	Moore	12.28	62%	38%	0%	174	\$36,107	\$125,000

### III. Harmony of Use/Compatibility

I have visited over 200 solar farms and sites on which solar farms are proposed in North Carolina to determine what uses are compatible with a solar farm. The data I have collected and provide in this report strongly supports the compatibility of solar farms with adjoining agricultural and residential uses. While I have focused on adjoining uses, I note that there are many examples of solar farms being located within a quarter mile of residential developments, including such notable developments as Governor's Club in Chapel Hill, which has a solar farm within a quarter mile as you can see on the following aerial map. Governor's Club is a gated golf community with homes selling for \$300,000 to over \$2 million.



The subdivisions included in the matched pair analysis also show an acceptance of residential uses adjoining solar farms as a harmonious use.

Beyond these anecdotal references, I have quantified the adjoining uses for a number of solar farm comparables to derive a breakdown of the adjoining uses for each solar farm. The chart below shows the breakdown of adjoining or abutting uses by total acreage.

#### Percentage By Adjoining Acreage

Total Solar Farms Reviewed 173

	Res	Ag	Res/AG	Park	Sub	Comm	Ind	All Res Uses	All Comm Uses
<b>Average</b>	13%	57%	22%	1%	0%	0%	5%	94%	5%
<b>Median</b>	6%	63%	7%	0%	0%	0%	0%	100%	0%

Res = Residential, Ag = Agriculture, Sub = Substation, Com = Commercial, Ind = Industrial.

I have also included a breakdown of each solar farm by number of adjoining parcels rather than acreage. Using both factors provides a more complete picture of the neighboring properties.

#### Percentage By Total Number of Adjoining Parcels

<b>Total Solar Farms Reviewed</b>	<b>173</b>							<b>All Res</b>	<b>All Comm</b>
	<b>Res</b>	<b>Ag</b>	<b>Res/AG</b>	<b>Park</b>	<b>Sub</b>	<b>Comm</b>	<b>Ind</b>	<b>Uses</b>	<b>Uses</b>
<b>Average</b>	58%	27%	9%	0%	0%	2%	4%	94%	5%
<b>Median</b>	63%	25%	4%	0%	0%	0%	0%	100%	0%

**Res = Residential, Ag = Agriculture, Sub = Substation, Com = Commercial, Ind = Industrial.**

Both of the above charts show a marked residential and agricultural adjoining use for most solar farms. Every single solar farm considered included an adjoining residential use except for one, which included an adjoining residential/agricultural use. These comparable solar farms clearly support a compatibility with adjoining residential uses along with agricultural uses.

#### IV. Summary of Local Solar Farm Projects

On the following page is a breakdown of other solar farms in and around Moore County where I have tracked adjoining uses. A summary of that data is presented below.

Parcel #	County	City	Name	Output (MW)	Acres	Avg. Dist Closest Adjoining Use by Acreage			
						to home	Home	Residential %	Agricultural % Comm/Ind %
6	Chatam	Chapel Hill	Strata	1.57	14.154			0%	100% 0%
15	Scotland	Laurinburg	Eastover	6.4	27.84			0%	100% 0%
19	Chatham	Chapel Hill	Vickers	2	12.6			21%	71% 8%
28	Harnett	Erwin	Erwin	5				63%	9% 28%
39	Chatam	Siler City	Pit 64	5	47.92			2%	98% 0%
50	Harnett	Lillington	McDougald		32.67	924	460	2%	98% 0%
58	Harnett	Coats	Coats		39.23	328	55	5%	95% 0%
79	Harnett	Fuquay Varina	Kathleen		102.6	1095	790	28%	72% 0%
90	Hoke	Raeford	Shelter		49.02	332	160	11%	89% 0%
129	Harnett	Dunn	Meadowlark		44.55	N/A	N/A	43%	57% 0%
142	Moore	West End	Pine Valley	4.996	89.44	830	140	7%	86% 8%
143	Moore	West End	Pinesage	4.996	141.9	1894	1060	20%	80% 0%
161	Chatham	Carboro	West Siler Suits		195.07	1174	450	13%	87% 0%
163	Chatham	Siler City	Siler 421		60.06	545	250	18%	78% 4%
166	Moore	Aberdeen	Moore I	2.77	25.1	382	205	19%	81% 0%
167	Moore	Carthage	Moore II	4.998	127.73	1089	160	20%	80% 0%
193	Randolph	Climax	Climax		48.07	661	191	17%	83% 0%
198	Harnett	Angier	Angier Farm	5.5	49.17			2%	98% 0%
202	Moore	West End	Highway 211		308.05	1538	67	4%	96% 0%
203	Moore	Candor	Spicewood	6.4	40.16	655	331	3%	84% 13%
207	Harnett	Lillington	Clovelly		55.79	555	555	2%	98% 0%
210	Moore	Carthage	Sedberry Farm	5	31.38	422	250	15%	85% 0%
214	Randolph	Liberty	Henry	5	80.2	521	110	24%	72% 4%
<b>Total Number of Solar Farms</b>				23					
Average				4.59	73.76	809	327	15%	83% 3%
Median				5.00	48.55	658	228	13%	85% 0%
High				6.40	308.05	1894	1060	63%	100% 28%
Low				1.57	12.60	328	55	0%	9% 0%

The data above shows that the breakdown of adjoining uses in Moore County and the adjoining Counties is predominately Residential and Agricultural. Residential uses range up to 63% of the adjoining uses, which is similar to the subject property as shown in the restated chart below for the adjoining uses for the proposed Dabestani Project. Furthermore, while the adjoining percentages are at the high end of the range by acreage, the adjoining residential uses are on much larger tracts with a median size of 15 acre residential acres, which is very consistent with agricultural uses.

The data shown for the Matched Pairs showed that the population density around the proposed subject property is much lower than the comparables, which further supports the assertion that this is a more rural area with a lower population density than the locations of those other solar farms.

#### Adjoining Use Breakdown

	Acreage	Parcels
Residential	62.25%	88.89%
Agricultural	37.75%	11.11%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

## **V. Specific Factors on Harmony of Use**

I have completed a number of Impact Studies related to a variety of uses and I have found that the most common areas for impact on adjoining values typically follow the following hierarchy with descending levels of potential impact. I will discuss each of these categories and how they relate to a solar farm.

1. Hazardous material
2. Odor
3. Noise
4. Traffic
5. Stigma
6. Appearance

### **1. Hazardous material**

The solar farm presents no potential hazardous waste byproduct as part of normal operation. Any fertilizer, weed control, vehicular traffic, or construction will be significantly less than typically applied in a residential development or even most agricultural uses.

The various solar farms that I have inspected and identified in the addenda have no known pending environmental impacts associated with the development and operation.

### **2. Odor**

The various solar farms that I have inspected produced no noticeable odor.

### **3. Noise**

These are passive solar panels with no associated noise beyond a barely audible sound during daylight hours. The transformer reportedly has a hum similar to a fluorescent light in an office building that can only be heard in close proximity to this transformer and the buffers on the property are sufficient to make emitted sounds inaudible from the adjoining properties. No sound is emitted from the facility at night.

The various solar farms that I have inspected were inaudible from the roadways. I heard nothing on any of these sites associated with the solar farm.

### **4. Traffic**

The solar farm will have no onsite employee's or staff. The site requires only minimal maintenance. Relative to other potential uses of the site (such as a residential subdivision), the additional traffic generated by a solar farm use on this site is insignificant.

### **5. Stigma**

There is no stigma associated with solar farms and solar farms and people generally respond favorably towards such a use. While an individual may express concerns about proximity to a solar farm, there is no specific stigma associated with a solar farm. Stigma generally refers to things such as adult establishments, prisons, rehabilitation facilities, and so forth.

Solar panels have no associated stigma and in smaller collections are found in yards and roofs in many residential communities. Solar panels on a roof are often cited as an enhancement to the property in marketing brochures.

I see no basis for an impact from stigma due to a solar farm.

## 6. Appearance

Larger solar farms using fixed panels are a passive use of the land that is considered in keeping with a rural/residential area. As shown below, solar farms are comparable to larger greenhouses. This is not surprising given that a greenhouse is essentially another method for collecting passive solar energy. The greenhouse use is well received in residential/rural areas and has a similar visual impact as a solar farm.



The fixed solar panels are all less than 10 feet high, which means that the visual impact of the solar panels will be similar in height to a typical greenhouse and lower than a single story residential dwelling. Were the subject property developed with single family housing, it would have a much greater visual impact on the surrounding area given that a two-story home with attic could be three to four times as high as these proposed panels. The panels will be located behind a chain link fence.

## 7. Conclusion

On the basis of the factors described above, it is my professional opinion that the proposed solar farm will be in harmony with the area in which it is to be developed. The breakdown of adjoining uses is similar to the other solar farms tracked.

## **VI. Market Commentary**

I have surveyed a number of builders, developers and investors regarding solar farms over the last year. I have received favorable feedback from a variety of sources; below are excerpts from my conversations with different clients or other real estate professionals.

I spoke with Betty Cross with Keller Williams Realty in Chapel Hill, who sold the tract of land adjoining the White Cross Road solar farm. She indicated that the solar farm was not considered a negative factor in marketing the property and that it had no impact on the final price paid for the land.

I spoke with Lynn Hayes a broker with Berkshire Hathaway who sold a home at the entrance to Pickards Mountain where the home exits onto the Pickard Mountain Eco Institute's small solar farm. This property is located in rural Orange County west of Chapel Hill. This home closed in January 2014 for \$735,000. According to Ms. Hayes the buyer was excited to be living near the Eco Institute and considered the solar farm to be a positive sign for the area. There are currently a number of 10 acre plus lots in Pickards Meadow behind this house with lots on the market for \$200,000 to \$250,000.

A new solar farm was built on Zion Church Road, Hickory at the Two Lines Solar Farm on the Punch property. After construction of the solar farm in 2013, an adjoining tract of land with 88.18 acres sold for \$250,000, or \$2,835 per acre. This was a highly irregular tract of land with significant tree cover between it and the solar farm. I have compared this to a current listing of 20.39 acres of land that is located southeast just a little ways from this solar farm. This land is on the market for \$69,000, or \$3,428 per acre. Generally, a smaller tract of land would be listed for more per acre. Considering a size adjustment of 5% per doubling in size, and a 10% discount for the likely drop in the closed price off of the asking price, I derive an indicated value per acre of the smaller tract of \$2,777 per acre. This is very similar to the recently closed sale adjoining the solar farm, which further supports the matched pair analysis earlier in this report.

Rex Vick with Windjam Developers has a subdivision in Chatham County off Mt. Gilead Church Road known as The Hamptons. Home prices in The Hamptons start at \$600,000 with homes over \$1,000,000. Mr. Vick expressed interest in the possibility of including a solar farm section to the development as a possible additional marketing tool for the project.

Mr. Eddie Bacon, out of Apex North Carolina, has inherited a sizeable amount of family and agricultural land, and he has expressed interest in using a solar farm as a method of preserving the land for his children and grandchildren while still deriving a useful income from the property. He believes that solar panels would not in any way diminish the value for this adjoining land.

I spoke with Carolyn Craig, a Realtor in Kinston, North Carolina who is familiar with the Strata Solar Farms in the area. She noted that a solar farm in the area would be positive: "A solar farm is color coordinated and looks nice." "A solar farm is better than a turkey farm," which is allowed in that area. She would not expect a solar farm will have any impact on adjoining home prices in the area.

Mr. Michael Edwards, a broker and developer in Raleigh, indicated that a passive solar farm would be a great enhancement to adjoining property: "You never know what might be put on that land next door. There is no noise with a solar farm like there is with a new subdivision."

These are just excerpts I've noted in my conversations with different clients or other real estate participants that provided other thoughts on the subject that seemed applicable.

## **VII. Conclusion**

The matched pair analysis shows no impact in home values due to the adjacency to the solar farm as well as no impact to adjacent vacant residential or agricultural land. The criteria for making downward adjustments on property values such as appearance, noise, odor, and traffic all indicate that a solar farm is a compatible use for rural/residential transition areas.

Similar solar farms have been approved adjoining agricultural uses, schools and residential developments. Industrial uses rarely absorb negative impacts from adjoining uses. The adjoining residential uses to other solar farms have included single family homes up to \$270,000 on lots as small as 0.74 acres.

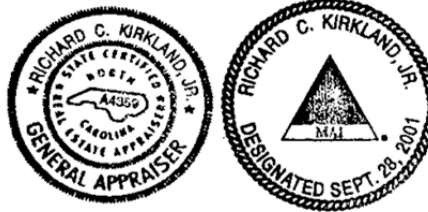
Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will not substantially injure the value of adjoining or abutting property and that the proposed use is in harmony with the area in which it is located.

If you have any further questions please call me any time.

Sincerely,



Richard C. Kirkland, Jr., MAI  
State Certified General Appraiser



### ***Limiting Conditions and Assumptions***

Acceptance of and/or use of this report constitutes acceptance of the following limiting conditions and assumptions; these can only be modified by written documents executed by both parties.

- ❖ The basic limitation of this and any appraisal is that the appraisal is an opinion of value, and is, therefore, not a guarantee that the property would sell at exactly the appraised value. The market price may differ from the market value, depending upon the motivation and knowledge of the buyer and/or seller, and may, therefore, be higher or lower than the market value. The market value, as defined herein, is an opinion of the probable price that is obtainable in a market free of abnormal influences.
- ❖ I do not assume any responsibility for the legal description provided or for matters pertaining to legal or title considerations. I assume that the title to the property is good and marketable unless otherwise stated.
- ❖ I am appraising the property as though free and clear of any and all liens or encumbrances unless otherwise stated.
- ❖ I assume that the property is under responsible ownership and competent property management.
- ❖ I believe the information furnished by others is reliable, but I give no warranty for its accuracy.
- ❖ I have made no survey or engineering study of the property and assume no responsibility for such matters. All engineering studies prepared by others are assumed to be correct. The plot plans, surveys, sketches and any other illustrative material in this report are included only to help the reader visualize the property. The illustrative material should not be considered to be scaled accurately for size.
- ❖ I assume that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. I take no responsibility for such conditions or for obtaining the engineering studies that may be required to discover them.
- ❖ I assume that the property is in full compliance with all applicable federal, state, and local laws, including environmental regulations, unless the lack of compliance is stated, described, and considered in this appraisal report.
- ❖ I assume that the property conforms to all applicable zoning and use regulations and restrictions unless nonconformity has been identified, described and considered in this appraisal report.
- ❖ I assume that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based.
- ❖ I assume that the use of the land and improvements is confined within the boundaries or property lines of the property described and that there is no encroachment or trespass unless noted in this report.
- ❖ I am not qualified to detect the presence of floodplain or wetlands. Any information presented in this report related to these characteristics is for this analysis only. The presence of floodplain or wetlands may affect the value of the property. If the presence of floodplain or wetlands is suspected the property owner would be advised to seek professional engineering assistance.
- ❖ For this appraisal, I assume that no hazardous substances or conditions are present in or on the property. Such substances or conditions could include but are not limited to asbestos, urea-formaldehyde foam insulation, polychlorinated biphenyls (PCBs), petroleum leakage or underground storage tanks, electromagnetic fields, or agricultural chemicals. I have no knowledge of any such materials or conditions unless otherwise stated. I make no claim of technical knowledge with regard to testing for or identifying such hazardous materials or conditions. The presence of such materials, substances or conditions could affect the value of the property. However, the values estimated in this report are predicated on the assumption that there are no such materials or conditions in, on or in close enough proximity to the property to cause a loss in value. The client is urged to retain an expert in this field, if desired.
- ❖ Unless otherwise stated in this report the subject property is appraised without a specific compliance survey having been conducted to determine if the property is or is not in conformance with the requirements of the

Americans with Disabilities Act (effective 1/26/92). The presence of architectural and/or communications barriers that are structural in nature that would restrict access by disabled individuals may adversely affect the property's value, marketability, or utility.

- ❖ Any allocation of the total value estimated in this report between the land and the improvements applies only under the stated program of utilization. The separate values allocated to the land and buildings must not be used in conjunction with any other appraisal and are invalid if so used.
- ❖ Possession of this report, or a copy thereof, does not carry with it the right of publication.
- ❖ I have no obligation, by reason of this appraisal, to give further consultation or testimony or to be in attendance in court with reference to the property in question unless further arrangements have been made regarding compensation to Kirkland Appraisals, LLC.
- ❖ Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected) shall be disseminated to the public through advertising, public relations, news, sales, or other media without the prior written consent and approval of Kirkland Appraisals, LLC, and then only with proper qualifications.
- ❖ Any value estimates provided in this report apply to the entire property, and any proration or division of the total into fractional interests will invalidate the value estimate, unless such proration or division of interests has been set forth in the report.
- ❖ Any income and expenses estimated in this report are for the purposes of this analysis only and should not be considered predictions of future operating results.
- ❖ This report is not intended to include an estimate of any personal property contained in or on the property, unless otherwise stated.
- ❖ This report is subject to the Code of Professional Ethics of the Appraisal Institute and complies with the requirements of the State of North Carolina for State Certified General Appraisers. This report is subject to the certification, definitions, and assumptions and limiting conditions set forth herein.
- ❖ The analyses, opinions and conclusions were developed based on, and this report has been prepared in conformance with, our interpretation of the guidelines and recommendations set forth in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA).
- ❖ This is a Real Property Appraisal Consulting Assignment.

## ***Certification – Richard C. Kirkland, Jr., MAI***

I certify that, to the best of my knowledge and belief:

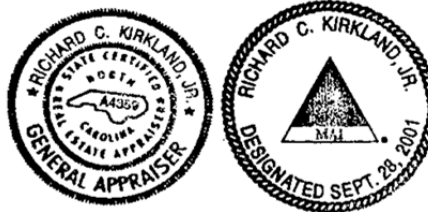
1. The statements of fact contained in this report are true and correct;
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions;
3. I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved;
4. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment;
5. My engagement in this assignment was not contingent upon developing or reporting predetermined results;
6. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of the appraisal;
7. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute;
8. The reported analyses, opinions and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
9. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives;
10. I have not made a personal inspection of the property that is the subject of this report, and;
11. No one provided significant real property appraisal assistance to the person signing this certification.
12. As of the date of this report I have completed the requirements of the continuing education program of the Appraisal Institute;
13. I have not appraised this property within the last three years. I provided an earlier draft of this report on 11/14/16.

Disclosure of the contents of this appraisal report is governed by the bylaws and regulations of the Appraisal Institute and the National Association of Realtors.

Neither all nor any part of the contents of this appraisal report shall be disseminated to the public through advertising media, public relations media, news media, or any other public means of communications without the prior written consent and approval of the undersigned.



Richard C. Kirkland, Jr., MAI  
State Certified General Appraiser





# Kirkland Appraisals, LLC

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Raleigh, North Carolina 27603  
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## PROFESSIONAL EXPERIENCE

<b>Kirkland Appraisals, LLC</b> , Raleigh, N.C. Commercial appraiser	2003 – Present
<b>Hester &amp; Company</b> , Raleigh, N.C. Commercial appraiser	1996 – 2003

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## PROFESSIONAL AFFILIATIONS

<b>MAI</b> (Member, Appraisal Institute) designation #11796	2001
<b>NC State Certified General Appraiser</b> # A4359	1999
<b>VA State Certified General Appraiser</b> # 4001017291	
<b>OR State Certified General Appraiser</b> # C001204	
<b>SC State Certified General Appraiser</b> # 6209	

## EDUCATION

<b>Bachelor of Arts in English</b> , University of North Carolina, Chapel Hill	1993
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## CONTINUING EDUCATION

Uniform Standards of Professional Appraisal Practice Update	2016
Forecasting Revenue	2015
Wind Turbine Effect on Value	2015
Supervisor/Trainee Class	2015
Business Practices and Ethics	2014
Subdivision Valuation	2014
Uniform Standards of Professional Appraisal Practice Update	2014
Introduction to Vineyard and Winery Valuation	2013
Appraising Rural Residential Properties	2012
Uniform Standards of Professional Appraisal Practice Update	2012
Supervisors/Trainees	2011
Rates and Ratios: Making sense of GIMs, OARs, and DCFs	2011
Advanced Internet Search Strategies	2011
Analyzing Distressed Real Estate	2011
Uniform Standards of Professional Appraisal Practice Update	2011
Business Practices and Ethics	2011
Appraisal Curriculum Overview (2 Days – General)	2009
Appraisal Review - General	2009
Uniform Standards of Professional Appraisal Practice Update	2008
Subdivision Valuation: A Comprehensive Guide	2008
Office Building Valuation: A Contemporary Perspective	2008
Valuation of Detrimental Conditions in Real Estate	2007
The Appraisal of Small Subdivisions	2007
Uniform Standards of Professional Appraisal Practice Update	2006
Evaluating Commercial Construction	2005

Conservation Easements	2005
Uniform Standards of Professional Appraisal Practice Update	2004
Condemnation Appraising	2004
Land Valuation Adjustment Procedures	2004
Supporting Capitalization Rates	2004
Uniform Standards of Professional Appraisal Practice, C	2002
Wells and Septic Systems and Wastewater Irrigation Systems	2002
Appraisals 2002	2002
Analyzing Commercial Lease Clauses	2002
Conservation Easements	2000
Preparation for Litigation	2000
Appraisal of Nonconforming Uses	2000
Advanced Applications	2000
Highest and Best Use and Market Analysis	1999
Advanced Sales Comparison and Cost Approaches	1999
Advanced Income Capitalization	1998
Valuation of Detrimental Conditions in Real Estate	1999
Report Writing and Valuation Analysis	1999
Property Tax Values and Appeals	1997
Uniform Standards of Professional Appraisal Practice, A & B	1997
Basic Income Capitalization	1996